

REMARKS

Claims 1-3 and 5-23 are pending in the application. Claims 1, 10, and 20 have been amended, and claim 4 was previously cancelled. Claim 20 has been amended to correct a minor inadvertent typographical error. No new matter has been introduced by the amendment.

REJECTION UNDER 35 U.S.C. §103(a)

Claims 1-3 and 5-23 have been rejected over De in view of Buchwalter et al. and Hiyamizu et al. This rejection is overcome in view of the amendment of claims 1 and 10 together with the following remarks.

Claim 1, as amended, recites a method for processing a workpiece that includes fastening a workpiece to a work carrier by means of a solid that is applied in liquefied form. The workpiece is in intimate contact with the solid. The work carrier comprises a porous material including a plurality of pores at least a portion of which are interconnected. The plurality of pores accommodates a portion of liquefied solid upon application of vacuum pressure to the work carrier. The method further includes hardening the liquefied solid and processing the workpiece while holding the workpiece on the work carrier. Solvent is applied through the plurality of pores to dissolve the solid and to release the workpiece from the work carrier. The applicants assert that claim 1 is not suggested or disclosed by the cited references taken alone or in combination.

As recited in the claims, the porous material includes a plurality of pores, at least a portion of which are interconnected. The workpiece is in intimate contact with the solid and both rest on the porous work carrier. As set forth in the applicants'

previous response, none of the cited references disclose the claimed porous work carrier.

De fails to suggest or disclose a work carrier that includes a plurality of pores at least a portion of which are interconnected, as acknowledged on page 2 of the instant Office Action. Further, De fails to suggest or disclose pores that are configured to accommodate a portion of a liquefied solid upon application of vacuum pressure to the work carrier. Moreover, De fails to disclose a process of fastening a workpiece to a porous workcarrier by applying a liquefied solid where the workpiece is in intimate contact with the solid, and hardening the liquefied solid.

Hiyamizu et al. disclose a porous body of thermoplastic resin that has a porosity ranging from ten to seventy percent, a pore diameter from 1 to 1,000 micrometers and having a configuration to accommodate a vacuum pressure in order to hold a workpiece onto the porous suction head. Despite the disclosure of a porous thermoplastic resin, Hiyamizu et al. do not disclose the interconnected pore network and pore passages, nor a workpiece in intimate contact with a liquefied solid, as recited by the present claims. Moreover, Hiyamizu et al. fail to disclose a process of fastening a workpiece to a porous workcarrier by applying a liquefied solid where the workpiece is in intimate contact with the solid, and hardening the liquefied solid.

Further, although Buchwalter et al. disclose the transport of vapor phase etch gasses through a porous transfer plate, the parting layer (306) that is etched by the etch gasses is not located directly against the transfer plate (404). Thus, Buchwalter et al. do not disclose a process of fastening a workpiece to a porous workcarrier by

applying a liquefied solid where the workpiece is in intimate contact with the solid, and hardening the liquefied solid.

Accordingly, a combination of the cited references does not yield all of the elements of the claimed method of processing a workpiece. In view of the failure of the cited references to suggest or disclose the claimed process of applying a liquefied solid to a porous work carrier and hardening the solid, together with the structural differences in the apparatus disclosed by Buchwalter et al. and Hiya Mizu et al., a *prima facie* case of obviousness is not established.

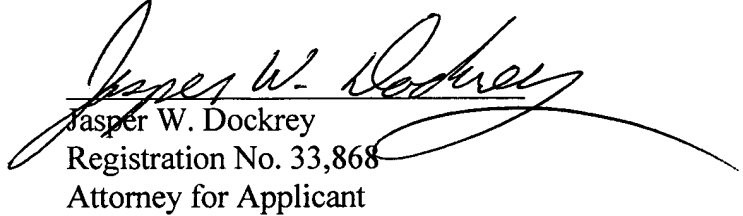
Claims 2-3 and 5-9 are allowable in view of the amendment and remarks pertaining to claim 1 from which they depend.

Claim 10 recites a work carrier for processing a work piece in which the work carrier comprises a porous material including a plurality of pores at least a portion of which are interconnected. The pores are configured to accommodate a portion of the liquefied solid upon application of a vacuum pressure to the work carrier and the liquefied solid is in intimate contact with the workpiece. The pores of the work carrier are further configured to accommodate the solid upon hardening and to provide for a flow of solvent therethrough to dissolve the hardened solid. The applicants assert that the cited references do not suggest or disclose the claimed work carrier. The foregoing remarks pertaining to the cited references are incorporated herein.

Claims 11 and 22-23 depend from claim 10 and describe further aspects of the work carrier of claim 10. These claims are allowable in view of the amendment and remarks pertaining to claim 10.

The applicants have made a novel and non-obvious contribution to the art of semiconductor fabrication technology and handling equipment. The claims that they should distinguish over the cited references and are in condition for allowance. Accordingly, such allowance is now earnestly requested.

Respectfully submitted,


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